



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,054	11/14/2001	Aref Ben Ahmed Jallouli	ESSR:058US/MBW	4850

7590 12/17/2008
FULBRIGHT & JAWORSKI L.L.P.
A REGISTERED LIMITED LIABILITY PARTNERSHIP
SUITE 2400
600 CONGRESS AVENUE
AUSTIN, TX 78701

EXAMINER

SERGEANT, RABON A

ART UNIT	PAPER NUMBER
----------	--------------

1796

MAIL DATE	DELIVERY MODE
-----------	---------------

12/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/992,054	JALLOULI ET AL.	
	Examiner	Art Unit	
	Rabon Sergent	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-24, 28-40, 42, 43 and 47-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-24, 29-35, 38, 40, 42, 43, 47 and 49 is/are rejected.
- 7) ☒ Claim(s) 28, 36, 37, 39 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1796

1. Claims 22-23, 29-35, 38, 42, 43, 47, and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, with respect to claim 32, improper Markush language has been set forth in that “groups” has been specified as opposed to "group".

Secondly, applicants have claimed a polythiourethane/urea material; however, the rejected claims set forth no definitive limitation that mandates the use of either an isothiocyanate group containing reactant or a thiol containing reactant. It is noted that all sulfur containing groups specified within claim 22 that would yield the thiourethane group are specified as optional, due to the use of parentheses; and there is no definitive requirement that one of the reactants must be such that a thiourethane will result.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1796

3. Claims 22-24, 29, 30, 33-35, 38, 40, 42, 43, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/36507 A1 in view of either Saegebarth ('841) or Bertozzi ('265).

WO 01/36507 discloses an optical polymerizate, suitable for the production of optical lens material having a refractive index that exceeds that claimed, wherein the polymerizate is produced from an isocyanate functional prepolymer and an aromatic primary diamine, wherein the reactants contain sulfur atoms. Furthermore, given the disclosures within the reference, the position is taken that the thiol reactant used to produce the prepolymer encompasses oligomers or monomers having repeating units. See abstract, pages 3-24, and claim 7.

4. Though the primary reference broadly discloses the use of thiol containing oligomers to produce the isocyanate functional prepolymer, the reference fails to disclose the specific use of a dithiol prepolymer that will yield a isocyanate terminated prepolymer free of disulfide linkage. Still, the use of oligomeric polyfunctional thiol compounds free of disulfide linkages as reactants for the production of polythiourethanes was known at the time of invention. This position is supported by the teachings of Saegebarth and Bertozzi. See column 1, lines 21-28 and 64+, within Saegebarth. See column 1, lines 46+ and column 5, lines 1+ within Bertozzi.

Accordingly, since these oligomeric thiols are disclosed as being useful for the production of polyurethanes, and since they satisfy the requirements of the thiols of the primary reference, the position is take that it would have been obvious to employ these oligomeric thiols as the thiol reactant of the primary reference, so as to arrive at the instant invention. Given the teachings of the primary reference, one of ordinary skill would have expected such a substitution to yield a viable polythiourethane in accordance with the requirements and objectives of the primary reference.

5. Claims 22-24, 29, 30, 33-35, 38, 40, 42, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/36508 A1 in view of either Saegebarth ('841) or Bertozzi ('265).

WO 01/36508 discloses an optical polymerizate, suitable for the production of optical lens material having a refractive index that exceeds that claimed, wherein the polymerizate is produced from an isocyanate functional prepolymer and an aromatic primary diamine, wherein the reactants contain sulfur atoms. Furthermore, given the disclosures within the reference, the position is taken that the thiol reactant used to produce the prepolymer encompasses oligomers or monomers having repeating units. See abstract, pages 3-23, and claim 7.

6. Though the primary reference broadly discloses the use of thiol containing oligomers to produce the isocyanate functional prepolymer, the reference fails to disclose the specific use of a dithiol prepolymer that will yield a isocyanate terminated prepolymer free of disulfide linkage. Still, the use of oligomeric polyfunctional thiol compounds free of disulfide linkages as reactants for the production of polythiourethanes was known at the time of invention. This position is supported by the teachings of Saegebarth and Bertozzi. See column 1, lines 21-28 and 64+, within Saegebarth. See column 1, lines 46+ and column 5, lines 1+ within Bertozzi.

Accordingly, since these oligomeric thiols are disclosed as being useful for the production of polyurethanes, and since they satisfy the requirements of the thiols of the primary reference, the position is take that it would have been obvious to employ these oligomeric thiols as the thiol reactant of the primary reference, so as to arrive at the instant invention. Given the teachings of the primary reference, one of ordinary skill would have expected such a substitution to yield a viable polythiourethane in accordance with the requirements and objectives of the primary reference.

Art Unit: 1796

7. Claims 28, 36, 37, 39, and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Rabon Sergent at telephone number (571) 272-1079.

/Rabon Sergent/
Primary Examiner, Art Unit 1796

R. Sergent
December 9, 2008